In the Claims:

Please amend claims 28 and 52 as follows. Please also add new claims 60-63. Please also cancel claims 37-45 and 49-51 without prejudice to applicants right to pursue the subject matter of these claims in another application. For the convenience of the Examiner, all pending claims, whether or not amended, are presented below.

28. **(Amended)** A method for enhancing ~~the~~ formation and development of dendrites and synapses in hippocampal neurons, comprising contacting said neurons with a morphogen ~~selected from: an OP-1 polypeptide, a BMP-2 polypeptide, a BMP-5 polypeptide, a BMP-6 polypeptide, or a 60A polypeptide, wherein said morphogen has~~ comprising a conserved C-terminal seven-cysteine skeleton at least about 60% ~~identical to residues 330-431 of human OP-1 (SEQ ID NO: 2), and wherein said~~ morphogen induces dendrite outgrowth in said hippocampal neuron.

29. (**Previously Presented**) The method of claim 28, wherein said morphogen comprises residues 30-292 of SEQ ID NO: 2.

30. (**Previously Presented**) The method of claim 28, wherein said morphogen comprises residues 330-431 of SEQ ID NO: 2.

31. (**Previously Presented**) The method of claim 28, wherein said morphogen comprises residues 48-292 of SEQ ID NO: 2.

32. (**Previously Presented**) The method of claim 28, wherein said morphogen comprises the amino acid sequence of SEQ ID NO: 2.

33. (**Previously Presented**) The method of claim 28, wherein said morphogen is a BMP-2 polypeptide.

34. (**Previously Presented**) The method of claim 28, wherein said morphogen is a BMP-5 polypeptide.

35. (**Previously Presented**) The method of claim 28, wherein said morphogen is a BMP-6 polypeptide.

36. (**Previously Presented**) The method of claim 28, wherein said morphogen is a 60A polypeptide.

37-45. (Canceled)

46. (**Previously Presented**) The method of claim 28, wherein said morphogen comprises residues 293-329 of SEQ ID NO: 2.

47. (**Previously Presented**) The method of claim 28, wherein said morphogen comprises residues 293-431 of SEQ ID NO: 2.

48. (**Previously Presented**) The method of claim 28, wherein said morphogen comprises residues 30-431 of SEQ ID NO: 2.

49-51. (Canceled)

52. (**Amended**) A method for enhancing ~~the~~ formation and development of dendrites and synapses in hippocampal neurons, comprising contacting said neurons with a morphogen ~~selected from: an OP-1 polypeptide, a BMP-2 polypeptide, a BMP-5 polypeptide, a BMP-6 polypeptide, or a 60A polypeptide, wherein said morphogen has~~ comprising a conserved C-terminal seven-cysteine skeleton at least about 70% homologous to residues 330-431 of human OP-1 (SEQ ID NO: 2), ~~and~~ wherein said morphogen induces dendrite outgrowth in said hippocampal neuron.

53. (**Previously Presented**) The method of claim 52, wherein said morphogen comprises residues 30-292 of SEQ ID NO: 2.

54. (**Previously Presented**) The method of claim 52, wherein said morphogen comprises residues 330-431 of SEQ ID NO: 2.

55. (**Previously Presented**) The method of claim 52, wherein said morphogen comprises residues 48-292 of SEQ ID NO: 2.

56. (**Previously Presented**) The method of claim 52, wherein said morphogen comprises the amino acid sequence of SEQ ID NO: 2.

57. (**Previously Presented**) The method of claim 52, wherein said morphogen comprises residues 293-329 of SEQ ID NO: 2.

58. (**Previously Presented**) The method of claim 52, wherein said morphogen comprises residues 293-431 of SEQ ID NO: 2.

59. (**Previously Presented**) The method of claim 52, wherein said morphogen comprises residues 30-431 of SEQ ID NO: 2.

60. (**New**) The method of claim 52, wherein said morphogen is a BMP-2 polypeptide.

61. (**New**) The method of claim 52, wherein said morphogen is a BMP-5 polypeptide.

62. (New) The method of claim 52, wherein said morphogen is a BMP-6 polypeptide.

63. (New) The method of claim 52, wherein said morphogen is a 60A polypeptide.